# Famous Woman Secret Service Agents in Civil War

MAJOR PAULINE CUSHMAN

MAJOR BELLE REYNOLDS

MISS ELIZABETH VAN LEW

MRS. KADY BROWNELL

MISS BELLE BOYD

Women Did Brilliant Work for Both Sides in the Great Struggle—Stories of Romance, Bravery and Intelligence—Miss Pauline Cushman One of the Most Famous of Spies—Secretary Stanton Honored Her With a Commission—Jackson's Valley Campaign Aided By the Confederate Spy, Belle Boyd—The Secret Service Agent in Richmond—Women Who Enlisted in the War as Men—Officer's Wife a Color-bearer at the Head of a Regiment.

WHILE the world is ringing with the valorous deeds, sacrifices and deprivations the women of Europe are undergoing for the cause for which their countries are battling, the minds of many of the men and women attending the encampment of the Grand Army of the Republic will revert to the part the brave women of both sides took in the civil war, when they served as soldiers, secret service agents, scouts and nurses, or in whatever capacity they were most needed, whether marching side by side with their male comrades or waiting just behind the line of battle for the wounded or dead.

The stories of the lives of these women read like border romances of Scotland, with all the bravery, daring, intelligence and science of a late century added.

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The blaze of the campfire or the whiz of a stray bullet is not needed to give zest to the story of that memorable night in March, 1863, in Wood's Theater, Louisville, Ky., when two paroled Confederate officers offered the actress, Pauline Cushman, a bribe to propose a toast to Jefferson Davis and the Confederacy.

Miss Cushman, who became one of the most noted spies in the Union army, and was commissioned a major by Secretary Stanton, was born in New Orleans in 1833, the daughter of a Spanish refugee and adventurer who left the south and went west to Michigan, where he became an Indian trader. The hardships of pioneer life did not suit the taste of Pauline, and, being unable to get employment there, she left her father and went to New York to seek work. She secured an engagement there as a variety actress, and later returned to the south to play engagements.

Those were troublous days for itinerant theatrical troupes. Traveling facilities in the south were more frequently carriages for the rich, but ox carts, springless wagons and mule teams for the less fortunate. So Miss Cushman early became inured to the hardships which later in her adventurous career stood her in such good stead, when she would have to roll up in her blanket by a campfire at night or mount and ride miles through the woods or over a dangerous road patrolled by the sentries of the enemy.

She was playing an engagement in "The Seven Sisters" that night in Louisville, when she was approached by the two Confederate officers in a spirit of fun and bravado, they having no idea that she would accept the wager. But being of strong Union sympathy, her woman's intuition told her that there was a chance to help the cause which was so near her heart. So she parried the proposal and reported the incident to Col. Moore, provost marshal of Louisville, who seeing in this clever, pretty woman a weapon for the north, advised her to give the toast.

The following evening in the course of the play, when the house was absolutely quite, she went forward to the front of the stage and boldly proposed a toast to Jefferson Davis and the Confederacy. Then she cried with much seeming enthusiasm: "May the south prosper and regain her rights."

Instantly the house was in an uproar of conflicting sentiments and for a moment it loked like Miss Cushman would either be mobbed or carried triumphantly from the theater. She was arrested and taken before Col. Moore, according to their preconceived plan, ostensibly to be reprimanded, but in reality to take the soldier's oath of allegiance to the Union, receive officials instructions and become a spy for the Union army.

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Miss Cushman lost her position at the theater, but remained in Louisville, where she rendered valuable service to the Army of the Cumberland until April, when she secured an engagement at Nashville, Tenn., in order to be nearer the Confederate lines. In May she was sent beyond the lines to gain information of the strength and movements of the Confederate forces.

It was while performing this duty that she was captured and sentenced by court-martial to be shot. She was imprisoned at Shelbyville, Ky., awaiting her execution, when she was found and released by the Union forces after they entered the town. When free she immediately took up her duties, frequently going in advance of the Federal army. She was twice again captured by the Confederates. Once about to be released, as no incriminating evidence was found upon her, a second and more thorough search revealed that in a hidden recess of her garments there were orders from Gen. Thomas. She was sentenced to be hung when the capture of Nashville by Gen. Thomas saved her.

Maj. Pauline Cushman was the only woman who held that rank in the Union army, except Maj. Belle Reynolds, wife of a Capt. Reynolds of the 7th Illinois, who followed her husband to the war and performed such exceptional service that Secretary Stanton honored her with a commission. She was a devoted friend of Mrs. U. S. Grant.

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The valley campaign of Stonewall Jackson has been compared to some of the brilliant exploits of Napoleon and has been pronounced by military experts one of the greatest feats of history, yet it might have been very different had it not been for the services of the brilliant young Confederate spy, Belle Boyd. That Jackson was fully aware of this is shown in his note to her, written after he had routed Gen. Banks, May 23, 1862, and driven him in confusion up the line of the Shenandoah. He wrote this clever school girl a graceful note saying, "I thank you for myself and for the army for the immense service that you have rendered your country today."

When Gen. Shields of the Union army took up his headquarters at the house of Miss Boyd's family he was treated with cold courtesy by all except Miss Boyd herself, who thought she saw in his residence there a means to help the cause in which she was heart and soul enlisted. She learned that Gen. Shields was to hold a council of war there, and as her room was above the chamber he occupied she determined to be an invisible member of that council. She bored a hole in the floor of her room and the whole night through kept her ear to that hole. The following morning Gen. Jackson knew in the plans made for a gigantic battle, and so accurately were they spread out before him that he was able to defeat the Union army.

The Union officers in the neighborhood knew that some one was doing clever detective work and began to suspect her. She was finally arrested by the Federals, but her beauty and girlish charm won her liberty as well as the hearts of her censors, and Jackson, fearing for her, ordered her removal to Winchester, where he conferred upon her a commission as captain in the Confederate army.

By this time Miss Boyd had become so noted for her work that the entire north became aware of her services, and all the officers and privates were on the lookout for her, hoping to have the distinction of capturing her. However, she was not caught until 1864, when she was captured on a blockade runner. But her captor was so fascinated with her that he deserted the navy and married her. The Prince of Wales, afterward Edward VII, was present at the wedding.

Another Virginia girl, Elizabeth B. Van Lew, while not as famous as Miss Boyd, did untiring service for the Union side, and in one way was the bravest of the southern spies. She remained in Richmond, the home of the Confederacy, during the four years of the war, and daily saw and talked with the men and women of the southern cause. She was aware of her perilous position, and she was heard to say that she never walked out or heard a knock at her door that she did not expect to hear the ominous words: "You are my prisoner!" Her duties were much more general than those of other spies. She made her house a refuge for escaped prisoners, attended the sick, administered to the helpless and was a walking post office for the prisoners at Libby prison.

One means employed to convey letters and messages to them was by the use of a metal platter with a false bottom. This platter was used to carry food. She was watched very closely by a Confederate guard who suspected her, and who finally insisted on examining the platter. Miss Van Lew was always on the alert, and on the day in question had filled the false bottom with boiling water, which gave the soldier an unexpected hot bath.

Her house was a network of secret hiding places for people and dispatches, and there was seldom a day that one or the other was not secreted there. She was ably assisted by an old negress, who would either convey the messages or dispatches to Gen. Grant or see that they reached him safely.

It was Miss Van Lew who performed the daring act of stealing the body of Col. Ulric Dahlgren and smuggling it out of Richmond.

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Kady Brownell, who is called the heroine of the battle of Newbern, was the wife of Robert S. Brownell, an orderly sergeant of a company in the 1st Rhode Island Infantry, one of the earliest regiments of three months' men, who responded to the first call for troops the day after national colors were hauled down the flag mast at Fort Sumter.

The First Rhode Island was composed of eleven companies of a hundred each, and as ten were enough for a complete organization the eleventh was formed into a company of carbineers or sharpshooters, which this courageous young woman, who had decided to follow the fortunes of war with her husband, was made the color-bearer of. When the regiment went into camp in Maryland in the summer of '61, she decided that she would not be simply the daughter of the regiment and an idle follower, but would learn all the duties of a soldier, making herself familiar with target practice and taking part in all the drills. She became one of the quickest and most accurate marksmen in the regiment and used her sergeant's straight sword with skill.

Mrs. Brownell was a practical feminist and sought no indulgences by reason of her sex. She marched in line by the side of her husband, wearing her sword and carrying the colors. She accepted the hardships and fatigue with the best of the men on the march toward Richmond in July, and on the day of general action was separated from her husband, the carbineers with whom she was connected being deployed as skirmishers in the skirt of pine woods on the left of the line. She did not carry her carbine that day, acting simply as color-bearer. One who took part in the action says:

"The men, according to skirmish tactics, were taken out by fours and advanced toward the enemy. Mrs. Brownell remained in line guarding the colors, and thus giving a definite point on which the men could rally, as the skirmish deepened into a general engagement. There she stood, unmoved and dauntless, under the withering heat and amid the roar, blood and dust of that terrible July day. Shells went screaming over her with the howl of an avenging demon and the air was thick and hot with deadly singing of the minie balls. About 4 o'clock, far away on the right, where the roar had been loudest, a sudden and marvelous change came over the scene. The Union line was broken, and what was a few moments before a firm and resolute army, worn and bleeding, but pressing to victory, became a confused, panic-stricken rout."

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Mrs. Brownell remained in position until the advancing batteries of the enemy opened within a few hundred yards of where she stood and were pouring shells into the retreating mass. They made her leave her position and follow the retreating men.

At the battle of Newbern she begged that she might carry the colors at the head of the stormers when they should charge upon the field works of the enemy. The privilege was granted her, with the understanding that she was to go with them up to the time when the charge should be ordered. It was fortunate that the permission was granted, for by her promptness and courage she saved the lives of a score of brave fellows who were on the point of being sacrificed by one of those blunders which cannot always be avoided in the enthusiasm and excitement of battle.

As the various regiments were taking their positions the 5th Rhode Island was seen advancing from a belt of wood in an unexpected direction. They were mistaken for a force of Confederates, and preparation was instantly made to open fire on it with both musketry and artillery, when Kady Brownell grasped the situation, ran out to the front with the colors in her hand until she reached clear ground, and then waved the flag until it was apparent that the advancing force were Federals.

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When the charge was made she begged again to carry the colors, but the commanding officer did not want her to again risk her life, so ordered her to the rear to care for the wounded. Her husband was wounded too severely to again be able for service, so she retired from the army with him, and carried an honorable discharge signed by Gen. Burnside.

It was in those early days of the civil war that northern officials and sympathizers in Washington were positive that some one was rendering masterly service to the Confederate army, and that the information being given could come from no other source than from some one in the capital. Whether it was a man or woman could not be determined, though the greatest espionage was exercised. That some one had given Beauregard news of McDowell's advance which had enabled the Confederates to foil the Federal plans for the campaign of Bull Run was not doubted. But that the agent was a woman sent by the shrewd Confederate spy, Mrs. Rosa B. Greenhow, was not suspected.

Mrs. Greenhow and her clever assistants were aiding in every possible way the Confederate forces, and were in some marvelous manner getting a vast amount of information. The 10th of July Mrs. Greenhow sent a Miss Duval to Gen. Beauregard to give him the first news of the contemplated advance, and July 16 sent him word of the forces and the contemplated movement of the Union army. Beauregard at once wired the information to President Davis, and the word was sent to Johnston which resulted in his advance and the defeat of the Federal forces.

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Every one is familiar with the notorious and fearless woman spy, Elizabeth W. Stiles, who served under Gen. James Lane. Mrs. Stiles' husband was murdered before her eyes by the Quantrell guerrillas in 1862. She swore vengeance, and from that time on was one of the most reckless fighters in border warfare. She placed herself under Lane's orders and was of invaluable assistance to him.

Another bold and fearless rider during the civil war was Olivia Floyd, who in 1864 carried the order when a Confederate force in Canada made the dashing but fruitless raid on Vermont. It was the fashion at that time for women to wear the hair dressed in a large chignon or waterfall held in place by a net. This young girl concealed papers in her hair, and on that bitter cold night, when the thermometer stood below zero, made her famous ride, dashing into the lines, where she delivered the orders that resulted in the attack on St. Alban's.

While these woman secret service agents were doing deeds of valor there were hundreds of others of their sex who were serving their country, carrying the musket, doing field service of every sort, nursing the sick and wounded, and many not less brave who remained at home preparing the lint and making the garments without which the war could not have been carried on.

Dr. Mary Walker received a commission as assistant surgeon, going through the war with it and making an enviable record. Mary Morris Husband, granddaughter of Robert Morris of revolutionary fame, left her home and became a nurse at Gettysburg, not only nursing, but doing valiant service for the helpless prisoners. Sarah Taylor of East Tennessee, who was called "Joan of Arc" by her comrades and who carried a sword and silver-mounted pistols, marched with the troops and cheered them on. Miss Mary Hancock of an Illinois regiment was the first woman recruit in the service of the United States. When the men in her district seemed slow about enlisting she went forward and was followed by two of her friends.

There was no braver soldier in the Union army than Frances Hook, a fourteen-year-old girl of Chicago, who enlisted with her brother in the 65th Illinois. After three months she was mustered out and then enlisted in the 19th. Her brother was killed at Shiloh, but the girl, still wearing the uniform of a man, fought through the war until Chickamauga, when she was captured and shot through the leg in an attempt to escape. While she was a prisoner in Atlanta Jefferson Davis is said to have offered her a lieutenancy if she would consent to join the Confederate forces. She is said to have replied that she would be hanged before she would take up arms against the Union. She enlisted under the name of Frank Miller.

Another little girl of twelve years enlisted as a drummer boy in a Pennsylvania regiment under the name of Charles Martin. She seemed unusually clever and made herself useful to the officers of the regiment as a clerk. She was in five battles, escaped without a bullet wound and her sex was never suspected until she was taken to a hospital in Philadelphia suffering from typhoid fever.

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One brave woman who fought in the battle of Gettysburg was Mary Siezgle, wife of a soldier in the 44th New York regiment. She first served as a nurse, but later put on a soldier's uniform and did her share of actual fighting.

Many young girls enlisted in the armies on both sides because they did not wish to be separated from their sweethearts. One of the best known of these was Fanny Wilson of the 24th New Jersey, who enlisted in the same regiment with the young man to whom she was engaged. He knew nothing of her action, but she saw him every day, and on one occasion came near being assigned to the same mess tent with him. At Vicksburg she was shot and so was the young man. Miss Wilson nursed him, but did not reveal her identity until just before his death. She remained with him, closed his eyes and then went north to Cairo, Ill. But the spirit of battle was too strong for her and she re-enlisted, still wearing male uniform in the 3d Illinois Regiment. Being suspected as a Confederate spy, she was taken to the headquarters of the commanding officer, where she made it clear that she was a loyal Federal soldier.

Another case of this sort was Annie Lillybridge of Detroit, who was betrothed to a lieutenant in the 21st Michigan and decided to put on a soldier's uniform that she might be near him. Miss Lillybridge enlisted in the same regiment without his knowledge, but in a different company. One of her comrades after several months became aware of her sex. She was disabled by a shot in the arm, and, her sex again being discovered, she was sent home.

One of the distinguished woman detectives of the Union will be a visitor to the encampment. She is Mrs. Lottie B. McCaffrey of Allegheny, Pa., who was captured by the Confederates when she was a girl of nineteen, charged with being a spy and confined in "Castle Thunder," at Richmond. On the 26th of June, 1863, she was taken at Cacapon River bridge, W. Va., by Lieut. Bell, a nephew of Gen. Bell, C. S. A., and by order of Gen. Lee was confined in prison until December 1, 1863, when, by Gen. Lee's order, she was exchanged with 1,000 male prisoners at City Point. In company with the other prisoners she sailed up Chesapeake bay on a United States vessel to Baltimore and from there went to Pittsburgh.

# Woman's Relief Corps Aids G. A. R. Veterans and Their Dependent Ones

The Largest Body of Women in the World Working Under One Motto and for One Cause—Caring for Veterans and Those Who Are Dependent Upon Them—Homes Established in Thirty States for Veterans, Their Widows and Children—Efforts for Patriotic Education in the Schools—Washington Woman Heads Committee in Charge of Reclaiming the Flag From Desecration.

PATRIOTISM is the watchword of the day, and women all over the world, impressed by the spectacle of the European war, are surely and steadily absorbing the spirit of larger helpfulness in their auxiliary work for the men whose places were, are and shall be the battle front.

American women have ever shown the most indomitable spirit in their country's seasons of stress and strain from the earliest days, when infinite courage and resource were necessary to meet the snares of the wily Indians; through revolutionary times, when their splendid bravery was at times the stanchest bulwark the ragged continentals had to lean upon, down to civil war days, when the first recognized organization of American women in warfare were permitted to carry their zeal to the very field of battle, and they nursed and cooked for the fighting men at the front. These were followed by the splendidly organized body of 2,000 women who went forth to help during the war with Spain.

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The nation's mightiest struggle was the civil war, and its heroes can never be forgotten, nor can it cease to honor them in life. One of the noblest bodies of patriotic women in America is the Woman's Relief Corps, organized thirty-two years ago as an auxiliary to the Grand Army of the Republic, at its encampment held in Denver, that their women's wit and their deft women's hands might make the lot of the survivors among those who had fought to preserve the Union more comfortable.

This is the largest body of women in the world working under one motto and for one cause. The men gave the women their motto—fraternity, charity, loyalty—and under this guiding principle 187,000 women are performing what is perhaps the largest women's auxiliary work in the country today. Their endeavor has covered the expenditure of more than $4,000,000 in cash in relief pure and simple, and a relatively larger accomplishment along the lines of education, historical achievement and development in patriotism has been fulfilled.

The chief work of the order has always been caring for veterans and their dependent ones—the widows, mothers and children. Orphanages have been founded, schools have been opened with the assistance of the Grand Army of the Republic, and the Woman's Relief Corps has assisted in establishing homes in about thirty states, where veterans and their wives, widows and perhaps old mothers have gone to spend their declining years.

In many cases the states have taken over these homes after their establishment, but the Woman's Relief Corps sees that they are kept supplied with all the comforts and small luxuries which it is beyond the province of the state to provide, but which it is right that these sufferers from a country's war should not lack.

In Ohio this able body of women founded an army nurses' home, where some of the surviving nurses who ministered to the stricken during the civil war are spending their later years in ease and comfort. This is now under the jurisdiction of the state of Ohio. In the larger cities throughout the country many beds have been endowed in many hospitals for the female members of the families of veterans, who may be unable to meet hospital expenses.

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Next to its charitable work, on which it spends many thousands of dollars annually, the Woman's Relief Corps ranks its work of patriotic education. It was the first organization to go into the public schools of the country with a request that instruction be given pupils with regard to the history of the flag of the nation, and to ask that they be patriotically taught regarding achievements of the nation under the Stars and Stripes.

When one sees the American flag flying from the schoolhouses of the land one may know that the influence of the Woman's Relief Corps has passed that way, for it has given more than 100,000 flags to the schools throughout the country, and has had the pupils instructed in giving the salute to their national banner. The Woman's Relief Corps is responsible for the institution of Flag day as a state holiday, and the success in this respect is now effective in some twenty states, including the District of Columbia.

They also have, in connection with the G. A. R. and other organizations, instigated state legislatures to make statutes for the prevention of the desecration of the United States flag, the main object being to keep advertisers from using the flag for business purposes.

A Washington woman, Mrs. Isabel Worrell Ball, was appointed chairman of the national organization of the work in charge of reclaiming the flag from desecration. In pursuance of that work Mrs. Ball has spoken in all the large cities of the country, meeting the cooperation of the best citizens of the entire United States. She possesses two albums containing more than 700 post cards, every one of them a desecration of the flag. Efforts have been made to procure the passage of a bill through Congress protecting the flag from desecration, and while the consensus of opinion is fer its protection, congressional legislation has not yet been accomplished to that end, so that the missionary endeavor must yet go on.

One of the greatest accomplishments of the Woman's Relief Corps has been the reclamation of the old stockade at Andersonville, Ga., where about 13,450 Union prisoners languished and died and are buried. Many years ago the Department of Georgia, G. A. R., purchased twenty-six acres of land, which included the ground on which stood the Andersonville prison and the graves of their comrades. After years of effort they could make neither grass nor trees grow upon the blood-stained soil, and in 1896 they handed the project over to the Woman's Relief Corps.

The women went to work. They added thirty more acres to their holdings, and spent money generously in enriching, cultivating and planting, and during the fourteen years of their possession they made the desert to literally blossom as the rose, and beautiful Andersonville, with its luxuriant grass, its graceful shrubbery, blooming flowers and bowering trees, and its numberless beautiful monuments to its soldier dead, is one of the crowning glories of their endeavor. In 1910 Andersonville was presented to and accepted by the United States government, by which it is ranked as a national cemetery, and has the care and protection of those beautiful memorials of the civil war.

The Woman's Relief Corps holds its national conventions in connection with the National Encampment of the Grand Army of the Republic, and Washington will be host to probably 20,000 members of the order this week, with about 700 of this number voting delegates. The chief national officers of the organization are: National president, Sarah E. Fulton, Rochester, N. Y.; national senior vice president, Belle W. Bliss, Baraboo, Wis.; national junior vice president, Jennie L. Pond, Lansing, Mich.; secretary, Eliza Brown Daggett, Attleboro, Mass.; treasurer, Abbie Lynch, Pittsburgh; chaplain, Rosamund Dinsmore, Seattle, Wash.; chairman of executive board, Georgiana D. Van Fleet, Washington, D. C., and national patriotic instructor, Laura I. Smith, Attleboro, Mass.

The leading official hostesses for the Woman's Relief Corps on the occasion of its visit to Washington will be Mrs. Mamie Palmer Dorsey, chairman of the Woman's Relief Corps committee and president of the Department of the Potomac, W. R. C., and Mrs. W. E. Andrews, chairman of the women's citizens' committee of the District of Columbia. The Woman's Relief Corps convention will be held in the Metropolitan Methodist Church, its first session Wednesday afternoon, September 29. At this session the national president will read her opening address.

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The convention will spend a great part of its time over the reports of its national officers and the arrangement of work for the ensuing year, as well as upon the solution of several knotty financial problems before it, but it will take time for a number of lighter events. Interesting local occasions will be the reception Wednesday night, September 29, given by the national president of the W. R. C., in the rotunda of the Capitol, in honor of the commander-in-chief of the G. A. R. This is the first time since 1892 that the rotunda has been placed at the service of any organization for a function of this character. The affair will be one of the most brilliant of the week, the spectacular effect being enhanced by the line of seventy-five national aids, who will be gowned alike in white with broad yellow sashes.

The presentation will be made by Mrs. William E. Andrews, chairman of the Women's Citizen Association, and the national chief of staff, Mrs. Unigst. The national president will have in line with her Commander-in-Chief Palmer of the G. A. R., and the members of his staff, who will stand with the officers of the same rank of the national president's staff and with the past national presidents.

Other interesting occasions of the week will be the planting of the two memorial trees at the Lincoln memorial, and the Woman's Relief Corps will also take part in the planting of the two memorial trees at Arlington. Flags will be presented under the auspices of the order at the McKinley Manual Training School, at the Central High School and at the Colored High School on M street. Special programs have been arranged for these events in the auditoriums of the various schools thus honored. For these presentations Miss Mary Van Ness Fauth, department patriotic instructor, and Mrs. Isabel Worrell Ball, chairman of the national flag day committee, are arranging attractive programs. The Woman's Relief Corps will also attend in a body the open-air peace service which will be held in the grounds of the Episcopal Cathedral Sunday afternoon, October 3.

At the second session of the convention, held Thursday, the national officers for the ensuing year will be elected. Prominent candidates for national president are Mrs. Isabel Worrell Ball of Washington, Mrs. Lois Knauff of Ohio, Mrs. Bahrenburg of Illinois and Mrs. Lou Stewart Wadsworth of Massachusetts.

MRS. SARAH E. FULTON,
National president of W. R. C.

MRS. ISABEL WORRELL BALL,
Chairman of flag committee, W. R. C.

## THIS INSECT SHUNS POISON.

THE water bug is one of the trials, tribulations and all that of housekeeping. If the perplexed housekeeper does not put up a vigorous and relentless fight against water bugs, they may multiply by the million, and even if she does put up a fight against them they may still multiply by the million. The water bug is much given to multiplication, and when he and she consider a particular house as suitable to their needs, they are very persistent and tenacious in their occupany. It is easier to dispossess bad tenants than to put out water bugs. They seem to develop a sincere fondness for a piece of property, and they will insist on calling it their home in the face of all the protests that the titleholder may set up.

These water bugs are members of the old and numerous family of roaches. While the domestic species are few in number, nearly a thousand species of blattidae, for that is the official name of the family, have been described and preserved in collections, and it is estimated that perhaps upward of 5,000 species occur at the present time in different parts of the world. The great majority of the roaches live outdoors, and in warm countries have the reputation of living on plants and sometimes being very injurious. The theory that roaches are herbivorous is disputed by an Australian entomologist, J. G. O. Tepper, and he says that his experience with these insects is that they are eminently carnivorous, feeding on caterpillars and other soft-bodied insects, and that herbivorous larvae rapidly disappear from his garden when the roaches enter. He says that roaches will eat fruit and other products of plants, but he does not believe that their taste inclines toward green foliage.

One of the world's experts on roaches lives in Washington and works in the Department of Agriculture. His name is C. I. Marlatt, entomologist in the bureau of entomology. Mr. Marlatt has spent a great deal of time in the study of roaches. It is said that all roaches have heard of him. Writing of these insects recently, Mr. Marlatt said:

"The roach is one of the most primitive and ancient insects, in the sense of its early appearance on the globe, fossil remains of roaches occurring in abundance in the early coal formations, ages before the more common forms of insect life of the present day had begun to appear. The species now existing are few in number in comparison with the abundance of forms in the carboniferous age, which might with propriety be called the age of cockroaches, the moisture and warmth of that distant period being alike favorable to plant growth and to the multiplication of this family of insects. The house roaches of today were undoubtedly very early associated with man in his primitive dwellings, and through the agency of commerce have been carried to all quarters of the globe. On shipboard they are always especially numerous and troublesome, the moisture and the heat of the vessels being particularly favorable to their development."

Mr. Marlatt says that it is believed that the common cockroach, or so-called black beetle of Europe, is of Asiatic origin, and it is thought to have been introduced into Europe in the last 200 or 300 years, but it is his belief that the original home of this and the other common European species is obscure, and in point of fact they have probably both been associated with man from the earliest times, and naturally would come into the newly settled portions of Europe from the older civilizations of Asia and Egypt.

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The insect which gives so much trouble to housekeepers and which they call the "water bug" is known also as the German roach, and is near kin, perhaps a cousin or a half-brother, of the black cockroach. According to researches of the bureau of entomology, roaches are among the commonest and most offensive of the insects which frequent human habitations. They were well known to the ancients, who called them lucifuga, from their habit of always shunning the light. The common English name for them, or, more properly, for the common domestic English species, is "black beetle." In America this name has not been adopted to any extent for this insect, which was early introduced here, and the term "roach," or "cockroach," is the common appellation of all the domestic species.

The little German roach, however, is very generally known as the "Croton bug," or "water bug," from its early association with the Croton waterworks system in New York city. The popular designations of this insect in Germany illustrates in an amusing way both sectional and racial prejudices. In north Germany these roaches are known as "Schwaben," a term which applies to the inhabitants of south Germany, and the latter section retaliates by calling them "Preussen," after the north Germans. In east Germany they are called "Russen," and in west Germany "Franzosen," the last two appellations indicating a certain national antipathy to rival countries as well as a fanciful idea as to origin. Still other names are "Spanier," dating from the time of Charles V, and "Dane," from Denmark.

Roaches of all kinds are bad neighbors, and the damage they do is not only in the products actually consumed, but in the soiling and rendering nauseous of everything with which they come in contact. They leave, wherever they occur in any numbers, a "roachy" odor, which is persistent and cannot be removed from shelves and dishes without washing with soap and boiling water.

The roach problem is a difficult one, and the water bug is a very intelligent and nimble-witted fellow and is especially suspicious of man. Mr. Marlatt says that, like the crows among birds, the roaches among insects are apparently unusually well endowed with the ability to guard themselves against enemies, displaying great intelligence in keeping out of the way of the irate housekeeper and in avoiding food or other substances which have been doctored with poison for their benefit. Their keenness in this direction may be the accumulated inheritance of many centuries, during which the hand of man has ever been raised against them.